

Appl. No. 10/046,603; Filed January 16, 2002
Amendment Dated November 25, 2003
Reply to Office Action of October 10, 2003

REMARKS

Claims 1-22 remain in the application. Claims 4, 18 and 19 were amended. Claims 23-41 were cancelled without prejudice to further prosecution in another application. 1-22 are now pending in this application. Support for amendments to claims 18 and 19 are found in paragraph [0036] of the specification of application US 2003/0158270A1. No new matter has been added.

Applicant's representative wishes to thank the Examiner for courtesies extended during the course of an informal interview conducted on November 6, 2003, in which the claims were generally discussed.

Applicant confirms the election of claims 1-22 for further prosecution in this application.

Applicant gratefully acknowledges that claims 18 and 19 would be allowable if rewritten in independent form including the limitations of the base claim and intervening claims.

However, as indicted in the remarks set forth below, claim 1 from which claim 18 depends is no longer anticipated under §102 (e) by the cited reference to Mahajan. Thus, it is believed that this objection has been obviated and its withdrawal is respectfully requested.

Claims 4, 18 to 21 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for the reasons recited on pages 2 and 3 of the Office Action. Claim 4 was amended to provide antecedent basis for synthesis gas. Claims 18 and 19 were amended to recite a heterogeneous catalyst. As now amended, the rejection under 35 U.S.C. §112, second paragraph has been obviated and its withdrawal is respectfully requested.

Claims 1-17, 20-22 were rejected under 35 U.S.C. 102(e) as anticipated by U.S. Pat. No. 6,596,423 B2 to Mahajan. Both the cited patent and the above-referenced application have the same inventive entity and assignee. Accordingly, withdrawal of the rejections under 35 U.S.C. 102(e) is warranted and requested.

Appl. No. 10/046,603; Filed January 16, 2002
Amendment Dated November 25, 2003
Reply to Office Action of October 10, 2003

During the interview of November 6, 2003, the Examiner requested that Applicant distinguish U.S. Pat. No. 5,238,895 to Marchionna et al., which reference was made of record on form PTO-892, but not relied upon by the Examiner in the Office Action.

Marchionna et al. discloses a Cu based catalyst system that is activated by inorganic oxides of lanthanum or aluminum group.

Reactions catalyzed by the catalyst systems of Marchionna et al., require seven (7) hours to produce methanol as described in all the examples of the '895 reference. Based on total methanol produced after 7 hours, the average reaction rate using the Marchionna systems is from about 0.27 to about 0.56 moles methanol/mole catalyst/hour as calculated from mmoles of methanol in Examples 1 and 12-17 of the '895 reference. By contrast, when using the applicant's claimed catalyst, the average reaction rate can reach rates of from about 4 to 19.6 moles methanol/mole catalyst/hour (Examples 7 and 3, respectively, Table 1). This represents an improvement of at least one or almost two orders of magnitude for a reaction time of less than one half hour as shown in example 3, paragraph [0051], line 23 of NJ 2003/0158270 A1, the published application, or on page 18, line 15 of the originally filed application.

Thus, in view of the above amendments and remarks, it is now believed that the above referenced application is in condition for allowance. The issuance of a Notice of Allowance is earnestly solicited.

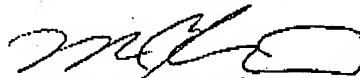
No additional fees are believed to be due by the instant response. However, should this be in error, authorization is hereby given to charge Deposit Account No. 02-3977 for any underpayment, or to credit any overpayments.

Additionally, if the Examiner is of the view that there are any issues still pending which present an impediment to allowance, it is respectfully requested that the undersigned be

Appl. No. 10/046,603; Filed January 16, 2002
Amendment Dated November 25, 2003
Reply to Office Action of October 10, 2003

contacted by telephone to conduct a telephone interview prior to issuance of the next official
action and such action is respectfully requested.

Respectfully submitted,



Margaret C. Bogosian
Attorney for Applicant
Registration No. 25,324

Date: November 25, 2003

Margaret C. Bogosian
Patent Counsel
Brookhaven National Laboratory
P.O. Box 5000
Bldg. 475D
Upton, New York 11973-5000
(631) 344-7338